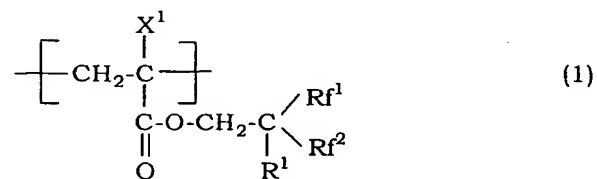


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

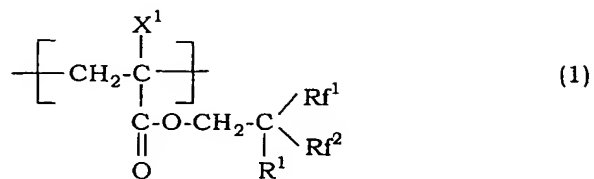
LISTING OF CLAIMS:

1. (original): A fluorine-containing optical material which comprises a fluorine-containing copolymer comprising from 32 to 36 % by mole of a structural unit (a) represented by the formula (1):



wherein X^1 is H, CH_3 , F, CF_3 or Cl; Rf^1 and Rf^2 are the same or different and each is a perfluoroalkyl group having 1 to 5 carbon atoms; R^1 is a hydrocarbon group having 1 to 5 carbon atoms which may be substituted with fluorine atom, and from 64 to 68 % by mole of a structural unit (b) derived from methyl methacrylate.

2. (original): A fluorine-containing optical material which comprises a fluorine-containing copolymer comprising from 15 to 62 % by mole of a structural unit (a) represented by the formula (1):

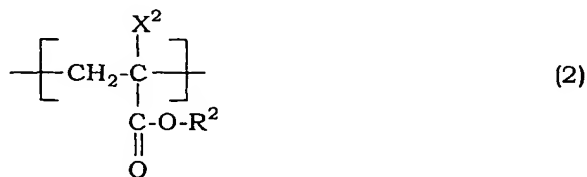


wherein X^1 is H, CH_3 , F, CF_3 or Cl; Rf^1 and Rf^2 are the same or different and each is a perfluoroalkyl group having 1 to 5 carbon atoms; R^1 is a hydrocarbon group having 1 to 5 carbon atoms which may be substituted with fluorine atom, from 12 to 70 % by mole of a structural unit (b) derived from methyl methacrylate and from 1 to 40 % by mole of a structural unit (c) (excluding the structural unit (a)) derived from a fluorine-containing monomer which is copolymerizable therewith.

3. (currently amended): The fluorine-containing optical material of Claim 2, ~~Claim 1 or 2~~, wherein in the formula (1), X^1 is CH_3 .

4. (original): The fluorine-containing optical material of Claim 3, wherein the fluorine-containing copolymer comprises from 23 to 50 % by mole of the structural unit (a), from 33 to 70 % by mole of the structural unit (b) and from 1 to 40 % by mole of the structural unit (c).

5. (currently amended): The fluorine-containing optical material of Claim 2, ~~any of Claims 2 to 4~~, wherein in the fluorine-containing copolymer, the structural unit (c) is a structural unit (c1) represented by the formula (2):



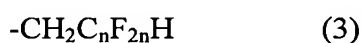
wherein X² is H, CH₃, F, CF₃ or Cl; R² is H or a fluoroalkyl group; the structural unit represented by the formula (1) is excluded, and when R² is H, X² is neither H nor CH₃.

6. (original): The fluorine-containing optical material of Claim 5, wherein in the formula (2), R² is a fluoroalkyl group having 3 to 8 carbon atoms.

7. (currently amended): The fluorine-containing optical material of Claim 5, ~~Claim 5 or 6~~, wherein the fluorine-containing copolymer comprises from 23 to 50 % by mole of the structural unit (a), from 33 to 70 % by mole of the structural unit (b) and from 1 to 40 % by mole of the structural unit (c1).

8. (currently amended): The fluorine-containing optical material of Claim 5, ~~any of Claims 5 to 7~~, wherein in the fluorine-containing copolymer, the number of carbon atoms of R² in the formula (2) representing the structural unit (c1) is from 4 to 6.

9. (original): The fluorine-containing optical material of Claim 8, wherein in the fluorine-containing copolymer, R² in the formula (2) representing the structural unit (c1) is represented by the formula (3):



wherein n is an integer of from 3 to 5.

10. (original): The fluorine-containing optical material of Claim 8, wherein in the fluorine-containing copolymer, R² in the formula (2) representing the structural unit (c1) is -CH₂C₄F₈H.

11. (currently amended): The fluorine-containing optical material of Claim 5, ~~any of Claims 5 to 10~~, wherein in the fluorine-containing copolymer, X² in the formula (2) representing the structural unit (c1) is -CH₃.

12. (currently amended): The fluorine-containing optical material of Claim 1, ~~any of Claims 1 to 11~~, which has a glass transition temperature of not less than 100°C, a refractive index of not more than 1.440 and a fluorine content of not less than 20 % by weight.

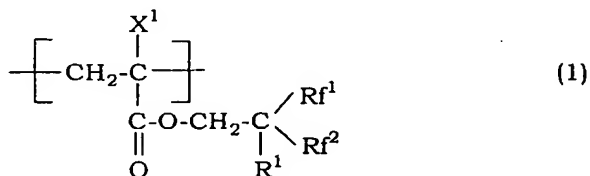
13. (original): The fluorine-containing optical material of Claim 12, wherein the glass transition temperature is not less than 105°C.

14. (currently amended): The fluorine-containing optical material of Claim 12, ~~Claim 12 or 13~~, wherein the refractive index is not more than 1.430.

15. (currently amended): The fluorine-containing optical material of Claim 12, ~~any of Claims 12 to 14~~, wherein the fluorine content is not less than 30 % by weight.

16. (currently amended): A material for clad of optical fiber which is obtained from the fluorine-containing optical material of Claim 1, ~~any of Claims 1 to 15~~.

17. (original): A fluorine-containing copolymer which has a weight average molecular weight of from 10,000 to 1,000,000 and comprises from 32 to 36 % by mole of a structural unit (a) represented by the formula (1):

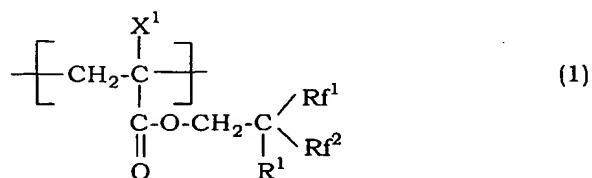


wherein X¹ is H, CH₃, F, CF₃ or Cl; Rf¹ and Rf² are the same or different and each is a perfluoroalkyl group having 1 to 5 carbon atoms; R¹ is a hydrocarbon group having 1 to 5 carbon

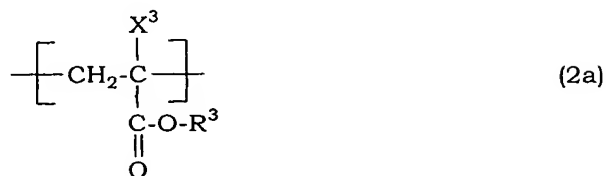
atoms which may be substituted with fluorine atom, and from 64 to 68 % by mole of a structural unit (b) derived from methyl methacrylate.

18. (original): The fluorine-containing copolymer of Claim 17, wherein in the formula (1), X^1 is CH_3 .

19. (original): A fluorine-containing copolymer which has a weight average molecular weight of from 10,000 to 1,000,000 and comprises from 15 to 62 % by mole of a structural unit (a) represented by the formula (1) :



wherein X^1 is H, CH_3 , F, CF_3 or Cl; Rf^1 and Rf^2 are the same or different and each is a perfluoroalkyl group having 1 to 5 carbon atoms; R^1 is a hydrocarbon group having 1 to 5 carbon atoms which may be substituted with fluorine atom, from 12 to 70 % by mole of a structural unit (b) derived from methyl methacrylate and from 1 to 40 % by mole of a structural unit (c2) represented by the formula (2a):



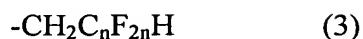
wherein X^3 is H, CH_3 , F, CF_3 or Cl; R^3 is H or a fluoroalkyl group; the structural unit represented by the formula (1) is excluded, and when R^3 is H, X^3 is neither H nor CH_3 .

20. (original): The fluorine-containing copolymer of Claim 19, wherein in the formula (1), X^1 is CH_3 .

21. (currently amended): The fluorine-containing copolymer of Claim 19, ~~Claim 19 or 20~~, which comprises from 23 to 50 % by mole of the structural unit (a), from 33 to 70 % by mole of the structural unit (b) and from 1 to 40 % by mole of the structural unit (c2).

22. (currently amended): The fluorine-containing copolymer of Claim 19, ~~any of Claims 19 to 21~~, wherein the number of carbon atoms of R^3 in the formula (2a) representing the structural unit (c2) is from 4 to 6.

23. (original): The fluorine-containing copolymer of Claim 22, wherein R^3 in the formula (2a) representing the structural unit (c2) is represented by the formula (3):



wherein n is an integer of from 3 to 5.

24. (original): The fluorine-containing copolymer of Claim 22, wherein R^3 in the formula (2a) representing the structural unit (c2) is $-\text{CH}_2\text{C}_4\text{F}_8\text{H}$.

25. (currently amended): The fluorine-containing copolymer of Claim 19, ~~any of Claims 19 to 24~~, wherein X^3 in the formula (2a) representing the structural unit (c2) is $-\text{CH}_3$.

26. (new): The fluorine-containing optical material of Claim 1, wherein in the formula (1), X^1 is CH_3 .

27. (new): The fluorine-containing optical material of Claim 2, which has a glass transition temperature of not less than 100°C , a refractive index of not more than 1.440 and a fluorine content of not less than 20% by weight.

28. (new): The fluorine-containing optical material of Claim 27, wherein the glass transition temperature is not less than 105°C .

29. (new): The fluorine-containing optical material of Claim 27, wherein the refractive index is not more than 1.430.

30. (new): The fluorine-containing optical material of Claim 27, wherein the fluorine content is not less than 30% by weight.

31. (new): A material for clad of optical fiber which is obtained from the fluorine-containing optical material of Claim 2.